

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application Ser. No.: 10/535,293

Group Art Unit: 2875

Filing Date: 5/17/05

Examiner: W.J.CARTER

Attorney Docket Number NL 021209

Confirmation No.: 5984

Inventor Name(s): VERSLUIJS, VAN DOMMELEN, JANSEN

Title: LIGHTING UNIT

Mail Stop Appeal Brief  
Commissioner for Patents  
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APPEAL BRIEF

Sir:

This is an appeal from the final rejection of Claims 1, 2, and 4-12.

I. REAL PARTY IN INTEREST

The real party in interest is Koninklijke Philips Electronics, N.V., a corporation of the Netherlands.

II. RELATED APPEALS AND INTERFERENCES

The assignee of the present application has a co-pending application US Pat. App. Ser. #10/510310 (Attorney docket #NL020329) that has a double patenting rejection over the present application. This co-pending application is also on appeal.

### III. STATUS OF CLAIMS

Claim 3 is allowed.

Claims 1, 2, 6, 7, and 11 stand rejected under 35 USC 102(b) over EP 0 336 478 A1.

("Maassen").

Claims 10 and 12 stand rejected under 35 USC 103(a) over Maassen.

Claims 4 and 5 stand rejected under 35 USC 103(a) over Maassen in view of US2277563

("Scott")

Claim 8 stands rejected under 35 USC 103(a) over Maassen in view of US 6382816

("Zhao")

Claim 9 stands rejected under 35 USC 103(a) over Maassen in view of US 5506464

("Ooms")

Claims 1, 2, 6, and 8 stand rejected on the grounds of double patenting over co-pending application serial #10/510,310 in view of Scott.

### IV. STATUS OF AMENDMENTS

There were remarks but no amendment under section 116. The remarks were not considered persuasive by the Examiner.

### V. SUMMARY OF CLAIMED SUBJECT MATTER

The claims relate to a lighting unit (1), a lamp (30), and a method for manufacturing a lighting unit.

#### Claims 1 & 11

Claim 1 recites a lighting unit (1), please see fig 1, and p. 4, line 14, et seq. The unit includes a concave reflector (2), a light emission window bounded by a circumferential edge (20), an elongate body (30) arranged substantially axially on the axis of symmetry of the reflector and accommodated in a holder (4) opposite the light emission window. An axially positioned cap (5) serves as an optical screening means. The cap intercepts unreflected light rays. The light source is surrounded by sleeve (60). The cap (5) is positioned over the sleeve at the end facing the emission window by means of a locking element.

Some examples of locking elements are shown at Fig. 2B, 71; Fig. 3 at K; Fig. 4 at L, Fig. 5 at M.

#### Claim 4

Claim 4 recites that the sleeve (60) is provided with an outer surface in which at least one recess (62) is present into which a portion of the locking element grips. The recess is shown in almost all of the figures and is discussed in several places, especially on page 5 of the specification.

#### Claim 5

Claim 5 recites that the locking element (K, L, M) grips partly into a mating recess (62) in the sleeve and at the same time lies enclosed with another portion in a mating locking holder (510) of the cap. This structure is shown in all of figures 3-5 and is discussed in the specification at p. 5, ll. 16-25

#### Claim 7

Claim 7 recites that the holder (4) is provided with a locking mechanism (41) adjacent a connection to the light source and the sleeve. Please see Fig. 6, and the specification at p. 5, line 31, et seq.

#### Claim 8

Claim 8 recites that the lamp is a metal halide lamp with a ceramic discharge vessel, per p. 3, line 9, et seq., and p. 4, lines 26-30, of the specification.

#### Claim 9

Claim 9 recites that the lamp is provided with a ceramic lamp base (8) which is connected to the assembly of reflector and light source by means of cement (80). The claim further recites that the cement forms an interlocking fixture, shown with respect to the shape of the openings (81, 811). This cement structure is discussed with respect to Fig. 6 and in the specification at p. 5, line 26 et seq.

The term “interlocking fixture” needs to be understood in light of the specification and drawing. When looking at the drawing, one can see that the cement (80) is an “interlocking fixture,” because of its shape when dry. In other words, the cement filling openings (81) and (811) cannot be pulled in the direction toward the exit window. The wedge shape of the holes has made the cement into an interlocking fixture, wider toward the base of the lamp than toward the exit window. Moreover, the base of the lamp can not be pulled away from element (4), because the cement (80), when dry, is wider than the openings (81) and (811). Thus the cement becomes an interlocking fixture when it is wider -- when dry -- than an opening through which it

might be pulled.

#### Claims 10 & 12

This claim recites that the locking element is a mechanical piece (K, L, M) distinct from the sleeve and the cap, e.g. per Figures 3-5 and discussed in the specification at page 5, lines 16-25.

Claim 12 is a method of manufacturing. While claim 12 has a very different scope from claim 10 in many respects, it is believed to be analogous to claim 10 with respect to the arguments over the cited reference.

#### VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

All rejections are to be reviewed.

#### VII. THE ARGUMENT

##### Claims 1 & 11

The question here is “What is a locking element?”

The Examiner asserts that the reference, Maassen, has a locking element, when the cap there is held on merely by friction or pressure.

The case of Phillips v. AWH Corp. 415 F.3d 1303; 2005 U.S. App. LEXIS 13954; 75 U.S.P.Q.2D (BNA) 1321, (Fed. Cir. July 12, 2005, decided, as amended July 14, 2005 indicates the specification and drawing to be the primary source of interpretation of claim terminology. The specification discusses Maassen, specifically distinguishes that document as lacking a locking element, and indicates that the design there suffers from the problem that the cap is not

securely placed. Accordingly, it is clear from the specification that the lamp unit of Maassen fails a locking element as that term is intended by the specification. The reference also fails to suggest that there would be any need for such a locking element.

Moreover, even in ordinary English, mere friction or pressure would not be interpreted as a locking element. One need only consider the example of those shoes known as “loafers.” If the undersigned wears a loafer on her foot that is held on by her foot, such an assembly would fail to teach or suggest that the loafer be locked onto her foot with a locking element. Mere friction or pressure is not a locking element. Without such a locking element, the loafers will slide off rather easily, which is precisely the problem that the invention is intended to address.

Applicants accordingly respectfully submit that the Examiner has failed to make a *prima facie* case against the reference and misconstrues the claims.

Claimed 11 is believed to be analogous to claim 1 with respect to the reference, except that it is not in Jepson form.

#### Claim 4

This claim stands rejected over Maassen in view of Scott.

This rejection is respectfully traversed as a complete misinterpretation of the Scott reference and of the language of the claims. In fact, Scott shows a wholly different structure from that recited in the claims and is completely incompatible with the structure of the lamp in Maassen. Applicants respectfully submit that one of ordinary skill in the art would not combine Maassen and Scott – and certainly would not interpret Scott the way the Examiner does.

Claim 4 depends on claim 1. Claim 1 recites a light source surrounded by a sleeve. It should be noted that the claim says “surrounded” not “around,” as misquoted by the Examiner.

The Examiner states that Scott's element 19 is a sleeve. Applicants respectfully disagree. The light source in Scott is filament 13. There is no sleeve around it. Scott's element 19 is not surrounding the light source as required by the claim. Instead it is surrounding the base of the lamp unit. Accordingly, element 19 fails to teach or suggest a sleeve as recited in Applicants' claims

Claim 4 recites that the sleeve has an outer surface in which at least one recess is present into which a portion of the locking element grips.

The Examiner cites opening 18 against this recitation. Applicants respectfully submit that the Examiner mischaracterizes the reference. Even assuming *arguendo* that thimble 19 were a sleeve, the opening 18 is not a recess in an outer portion of element 19. Opening 18 is stated to be an opening in the reflector not of element 19, per Scott's p. 2, col. 1, line 5. Moreover, opening 18 is on the inside of holder 19 not on its exterior as recited in the claim.

Claim 1, from which claim 4 depends, recites the cap is positioned over the sleeve adjacent the end.

The light shield 27 is not adjacent the end of thimble 19 in Scott. Instead, the shield is spaced at some distance from thimble 19 by elements 16 and 17 and also by the thickness of the reflector 10, 11, 14. Thus, even if the assembly of Scott's Fig. 3 were to be placed over the envelope 24 of Maassen, the result would not be the claimed invention, because the Scott's cap 27 would not be adjacent to Maassen's envelope 24, but rather spaced from it. It is not at all clear that this combination structure would be functional in operation, since the technologies are incompatible.

The Examiner insists in the advisory action that shield 27 is adjacent "via elements 16 and 31." Applicants respectfully submit that this interpretation flies in the face of the ordinary

meaning of “adjacent.”

Applicants accordingly respectfully submit that the Examiner has failed to make a *prima facie* case against claim 4 and completely misconstrues the Scott reference.

#### Claim 5

The Examiner purports to find the recitations of this claim in Scott. The Examiner states that the shield 27 has a mating locking holder, as recited in the claim; however, the Examiner then goes on to contradict himself by saying that the shield 27 is fused with the elements 16, 17, and 30. In fact, shield 27 has no mating locking holder as required by the claim. Applicants accordingly respectfully submit that the Examiner has failed to make a *prima facie* case against claim 5 and completely misconstrues the Scott reference.

#### Claim 7

The examiner purports to find the recitations of this claim in figure 1 of Maassen; however, the Examiner fails to point out any specific element which would be the locking mechanism. He points out the light source (22) and the sleeve (10 and 24). None of these is or has a locking mechanism. In fact, there appears to be no locking mechanism between the sleeve (24) and the holder of Maassen, any more than there is a locking element between the cap and sleeve Maassen. The issue here of what constitutes a “locking mechanism” seems to be very similar to the issue of what constitutes a “locking element” with respect to claim 1. Applicants accordingly respectfully submit that the Examiner has failed to make a *prima facie* case against claim 7.



#### Claim 8

Applicants respectfully submit that there is no teaching or suggestion in Zhao that would lead one of ordinary skill in the art to combine it with Maassen. Zhao is directed to coatings for a reflector with a casual mention of “ceramic metal halide lamps.” Applicants respectfully submit that the suggestion to combine these references comes from a database text search using Applicants’ claim language, which would constitute an impermissible hindsight in light of the present disclosure.

#### Claim 9

The Examiner purports to find cement used as an interlocking fixture in Ooms. Applicants respectfully disagree with this interpretation. The cement 29 merely holds some pieces together. It does not appear to interlock in any way at least in the fashion that term is used in the application. Applicants accordingly respectfully submit that the Examiner has failed to make a *prima facie* case against this claim.

#### Claims 10 & 12

The Examiner alleges that it would be obvious to add a locking element to Maassen. Applicants respectfully disagree. In order for someone to think of adding a locking mechanism to Maassen, that person would first have to recognize that there was a problem with Maassen. Often recognizing the problem is in very large part of invention. The inventors recognized the problem Maassen, while it appears that Maassen did not. Applicants accordingly respectfully submit that Maassen does not render these claims obvious -- and that the Examiner has not made a *prima facie* case against claim 10 or 12.

### Double patenting

Peters, the co-pending application, shows a sealed sleeve/cap unit 60/5, where the cap forms part of the sleeve. The double patenting rejection seems to be based on the idea that one might take Peters' sealed unit, saw off the cap portion 5, and then lock the cap portion back on with a locking element. Why on earth would one do this? It does not make sense. Why manufacture a unit, break it, then re-assemble it? The Examiner points to no motivation in the art for this procedure.

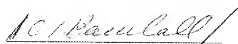
The deficiencies of Scott have already been discussed above with respect to claim 4

Applicants accordingly respectfully submits that the Examiner has failed to make a *prima facie* case of double patenting.

### VIII. CONCLUSION

Applicants respectfully submits that they have answered each issue raised by the Examiner and that the application is accordingly in condition for allowance. Such allowance is therefore respectfully requested.

Respectfully submitted,



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April 4, 2007

## CLAIMS APPENDIX

### CLAIMS APPENDIX

1. A lighting unit comprising

a concave reflector having an axis of symmetry

a light emission window bounded by a circumferential edge of the reflector that is

transverse to said axis,

an elongate body arranged substantially axially on the axis of symmetry and

accommodated in a holder opposite the light emission window,

an axially positioned cap serving as an optical screening means which surrounds a light source at least partly so as to intercept unreflected light rays,

characterized in that

the light source is surrounded by a sleeve having an end facing the light emission window, and

the cap is positioned over the sleeve adjacent said end by means of a locking element provided at the sleeve.

2. A lighting unit as claimed in claim 1, characterized in that the cap is provided with a screening ring which is impermeable to light and which extends transversely to the axis of symmetry.

3. A lighting unit comprising

a concave reflector having an axis of symmetry and

a light emission window bounded by a circumferential edge of the reflector that is

transverse to said axis,

## CLAIMS APPENDIX

an elongate body arranged substantially axially on the axis of symmetry and  
accommodated in a holder opposite the light emission window,  
an axially positioned cap serving as an optical screening means which surrounds the a  
light source at least partly so as to intercept unreflected light rays,

wherein

the light source is surrounded by a sleeve having an end facing the light emission  
window, and

the cap is positioned over the sleeve adjacent said end by means of a locking element  
provided at the sleeve

characterized in that the screening ring is provided with a ring edge facing towards the  
light source, and the locking element is provided with a tag-shaped element that grips into the  
ring edge with spring force radially away from the light source.

4. A lighting unit as claimed in claim 1, characterized in that the sleeve is provided with an  
outer surface in which at least one recess is present into which a portion of the locking element  
grips.

5. A lighting unit as claimed in claim 4, characterized in that the locking element grips partly  
into a mating recess in the sleeve and at the same time lies enclosed with another portion in a  
mating locking holder of the cap.

6. A lighting unit as claimed in claim 1, wherein the reflector and the light source are  
indetachably integrated into a lamp.

## CLAIMS APPENDIX

1 7. A lamp as claimed in claim 6, characterized in that the holder is provided with a locking  
2 mechanism adjacent a connection to the light source and the sleeve.

1 8. A lamp as claimed in claim 6, characterized in that the lamp is a metal halide lamp with a  
2 ceramic discharge vessel.

1 9. A lamp as claimed in claim 6, characterized in that the lamp is provided with a ceramic lamp  
2 base which is connected to the assembly of reflector and light source by means of cement, and in  
3 that said cement forms an interlocking fixture.

1 10. The unit of claim 1, wherein the locking element is a mechanical piece distinct from the  
2 sleeve and the cap.

1 11. A lighting unit comprising:

- 2 ○ a concave reflector defining an axis of symmetry;
- 3 ○ a light emission window bounded by a circumferential edge of the reflector, the edge  
4 being transverse to the axis;
- 5 ○ a light source;
- 6 ○ a sleeve surrounding the light source, positioned axially, and having an end facing the  
7 light emission window;
- 8 ○ a cap positioned axially over the sleeve, adjacent said end, the cap being for optically  
9 screening the light source and intercepting unreflected light rays; and

## CLAIMS APPENDIX

- a mechanical locking element for holding the cap to the sleeve.

12. A method of assembling a lighting unit,

the lighting unit comprising a reflector defining an axis of symmetry and a light source substantially on the axis, the reflector being adapted to hold an emission window at a position transverse to the axis and bounded by a circumferential edge of the reflector,

the method comprising

- situating a sleeve axially about the light source and extending from the reflector toward the position;
- locking a cap to the sleeve on an end of the sleeve facing the position, using a distinct locking element, the cap being adapted to serve as an optical screening means to intercept unreflected light rays

## EVIDENCE APPENDIX

(none)



## RELATED APPEALS APPENDIX

The related appeal is not yet decided.